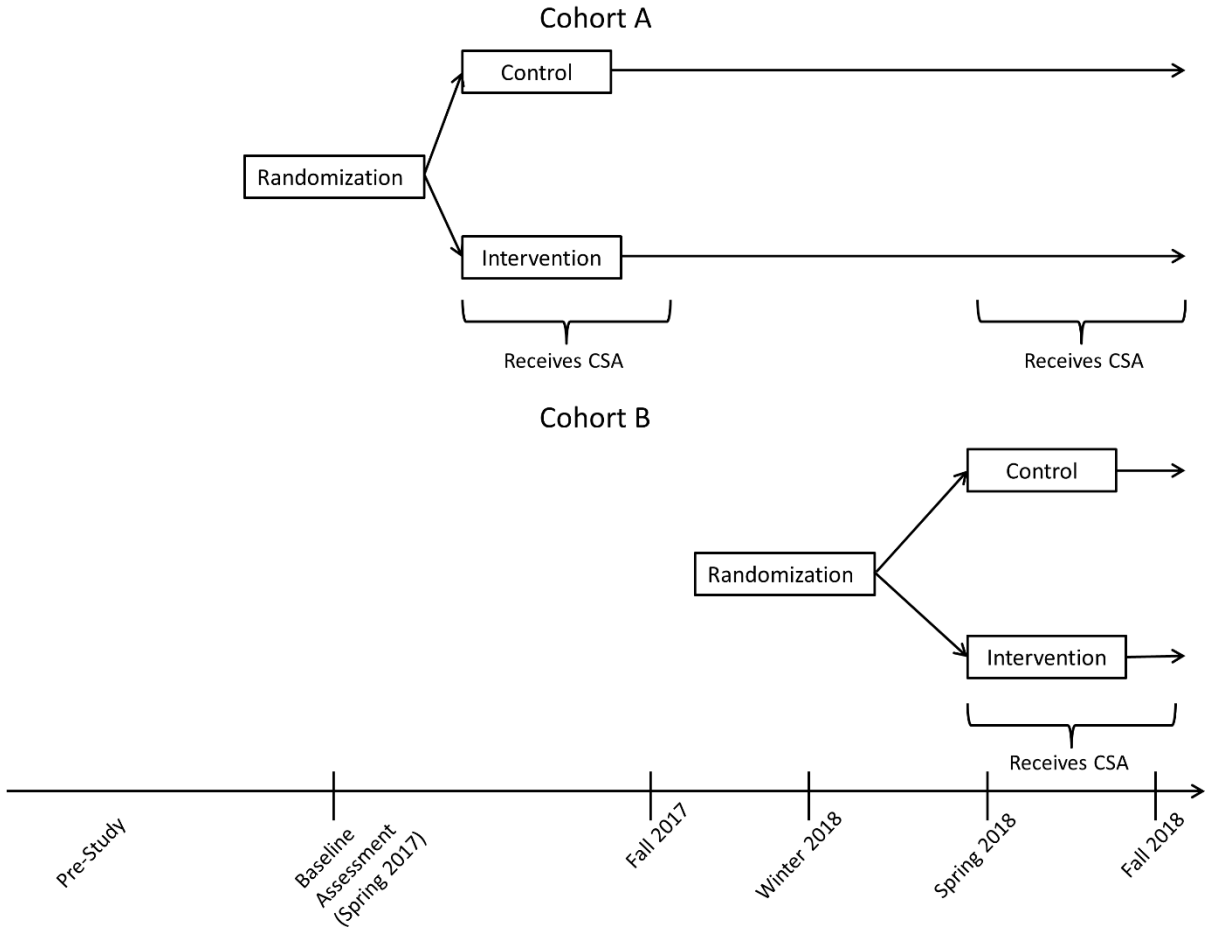
TECHNICAL APPENDIX

It was necessary to determine a clinically meaningful difference in HEI total score in order to power the study. For this study, we considered a 3 point difference in HEI total score to indicate a clinically meaningful difference. While we recognize that there is uncertainty in the field regarding what a clinically meaningful difference is, four lines of evidence led us to using this level. First, the Healthy Incentives Pilot,[15] a large randomized study of offering a 30% subsidy for SNAP (Supplemental Nutrition Assistance Program) benefits used to purchase particular healthy foods, found an increase in Health Eating Index Score of approximately 4.7 points. The independent evaluation of the Healthy Incentive Pilot concluded that this effect was "large enough to be nutritionally relevant".[15] Further, modeling studies estimating long-term effects with similar interventions consistently find clinical benefits.[30–33] Second, epidemiologic studies of dietary change have found that even small improvements in dietary quality are associated with important clinical outcomes across a number of diet quality indices. For example, investigators found that, compared to a group with a mean 2–3 point increase in AHEI score (which is scaled similarly to HEI score), those in groups with mean improvements greater than this level had lower total and cardiovascular mortality.[34] Third, in a prior study from our research group (which used an earlier version of the HEI score), even a 1-point difference in HEI score was associated with lower HbA1c over an approximately 2 year follow-up period. Finally, monitoring of socioeconomic disparities in diet has found that there is an approximately 1–2 point difference in HEI score between lower and higher income Americans, and an approximately 2–3 point difference in HEI score between those with less than high school education and those with some college education.[3] Though certainly not responsible for all health disparities between these groups, diet is cited as likely mechanism for health disparities,[35] suggesting that differences of this magnitude may affect population level health outcomes. Taking all this evidence together, we settled on a 3-point difference in HEI score to use for powering the study.

Appendix Figure 1. Study design schema.



CSA, Community Supported Agriculture.

Appendix Table 1. Description of Assessments Made at Each Research Visit

Research visit	Calendar time	Time within study (intervention period or non-intervention period)	Demographics	Dietary recall	Food security	PROMIS-10 global	PROMIS 4-item depression	PROMIS 4-item anxiety	Cost-related medication underuse	Put off buying medicine to afford food	Height, weight, blood pressure	Blood draw
1	Spring 2017	Non-intervention period (baseline; prior to first intervention period)	X	X	X	X	X	X	X	X	X	X
2	Fall 2017	Assessments part of first intervention period		X	X	X	X	X	X	X	X	X
3	Winter 2018	Non-intervention period		X	X	X	X	X	X	X	X	
4	Spring 2018	Non-intervention period (prior to second intervention period)		X	X	X	X	X	X	X	X	X
5	Fall 2018	Assessments part of second intervention period		X	X	X	X	X	X	X	X	X

Notes: Cohort B participants completed only research visits 4 and 5. Demographics were assessed at research visit 4 for cohort B participants, but education and income were inadvertently omitted. Additional dietary recalls were assessed outside of the research visits as described in the manuscript.

Appendix Table 2. Healthy Eating Index 2010

Component	Intake for maximum score	Intake for minimum score
HEI total (0–100)	–	–
Adequacy scores (higher score indicates greater consumption)		
HEI 1: total vegetables (0–5)	≥0.8 cups per 1,000 kcal	No consumption
HEI 2: greens and beans (0–5)	≥0.4 cups per 1,000 kcal	No consumption
HEI 3: total fruit (0–5)	≥1.1 cups per 1,000 kcal	No consumption
HEI 4: whole fruit (0–5)	≥0.2 cups per 1,000 kcal	No consumption
HEI 5: wholegrain (0–10)	≥1.5 oz per 1,000 kcal	No consumption
HEI 6: total dairy (0–10)	≥1.3 cups per 1,000 kcal	No consumption
HEI 7: total protein (0–5)	≥2.5 oz per 1,000 kcal	No consumption
HEI 8: seafood and plant protein (0–5)	≥0.8 oz per 1,000 kcal	No consumption
Moderation scores (higher score indicates lower consumption)		
HEI 9: fatty acids (0–10)	(PUFAs+MUFAs)/SFA≥2.5	(PUFAs+MUFAs)/SFA≤1.2
HEI 10: sodium (0–10)		
HEI 11: refined grain (0–10)	≥1.8 oz per 1,000 kcal	No consumption
HEI 12: “empty” calories (0–20)	≤1.1 grams per 1,000 kcal	No consumption
HEI total (0–100)	≤19% of energy	No consumption

Notes: Score range in parentheses. Adapted from: Table 1 in www.cnpp.usda.gov/sites/default/files/healthy_eating_index/HEI2010-UpdatePaper.pdf.

HEI, Healthy Eating Index; SFA, saturated fatty acids; PUFA, polyunsaturated fatty acids; MUFA, monounsaturated fatty acids.

Appendix Table 3. Baseline Characteristics of Cohort A and Cohort B

Characteristics	Cohort A (N=101) N (%) or mean (SD)	Cohort B[a] (N=21) N (%) or mean (SD)
In intervention group	45 (44.6)	11 (52.4)
Age, years	51.70 (13.28)	42.76 (13.99)
Female	83 (82.2)	16 (76.2)
Race/Ethnicity		
Non-Hispanic white	92 (91.1)	18 (85.7)
Non-Hispanic black	3 (3.0)	0 (0.0)
Hispanic	0 (0.0)	2 (9.5)
Asian/Multi-/Other	6 (5.9)	1 (4.8)
Receiving SNAP benefits	40 (40.4)	7 (33.3)
Food insecure	35 (35.4)	9 (42.9)
Cost-related medication underuse	17 (17.2)	6 (28.6)
Put off buying medications to afford food	14 (14.1)	4 (19.0)
PROMIS-10 global raw score	32.68 (6.21)	29.90 (7.53)
PROMIS 4-item depression raw score	7.70 (3.17)	8.00 (4.10)
PROMIS 4-item anxiety raw score	7.32 (2.81)	8.38 (3.72)
HEI total score	54.86 (15.33)	55.25 (15.45)
HEI 1 score	3.29 (1.67)	3.29 (2.06)
HEI 2 score	2.00 (2.33)	2.19 (2.33)
HEI 3 score	2.55 (2.12)	2.53 (2.23)
HEI 4 score	2.88 (2.28)	2.53 (2.34)
HEI 5 score	3.00 (3.83)	2.86 (3.95)
HEI 6 score	5.18 (3.55)	7.20 (2.85)
HEI 7 score	4.01 (1.55)	4.03 (1.40)
HEI 8 score	2.48 (2.30)	3.17 (2.32)
HEI 9 score	5.01 (3.55)	3.58 (3.26)
HEI 10 score	4.44 (3.54)	5.45 (3.93)
HEI 11 score	6.83 (3.59)	6.01 (3.59)
HEI 12 score	13.19 (6.29)	12.41 (5.53)
Weight, kg	93.40 (21.58)	85.53 (15.98)
BMI, kg/m^2	34.31 (8.14)	32.18 (6.70)
Systolic blood pressure, mm Hg	128.34 (20.92)	125.24 (13.87)
Diastolic blood pressure, mm Hg	77.17 (12.84)	81.76 (10.13)
Serum glucose, mg/dL	111.12 (48.13)	107.83 (19.55)
HbA1c, %	5.72 (1.22)	5.75 (1.28)
High-density lipoprotein cholesterol, mg/dL	57.52 (16.58)	45.33 (10.19)
Low-density lipoprotein cholesterol, mg/dL	109.53 (42.59)	112.60 (28.99)
Total cholesterol, mg/dL	197.88 (45.45)	184.83 (20.32)
Triglycerides, mg/dL	167.93 (156.67)	181.50 (127.67)

[a]Cohort B participants were inadvertently not asked about income, education, or nativity during their baseline examination. Laboratory examinations were non-fasting.

PROMIS, Patient Reported Outcome Management Information System; HEI, Healthy Eating Index; SNAP, Supplemental Nutrition Assistance Program.

Appendix Table 4. Research Visit Attendance by Group

Variable	Intervention group N (%)	Control group N (%)	*p* for difference[a]
Research visit 1	45 (100)	56 (100)	1.00
Research visit 2	38 (84)	52 (93)	0.11
Research visit 3	40 (89)	47 (84)	0.77
Research visit 4	49 (88)	58 (88)	1.00
Research visit 5	42 (75)	58 (88)	0.10
Telephone diet recall summer 2017	43 (96)	52 (93)	0.69
Telephone diet recall winter 2017–2018	39 (87)	52 (93)	0.33
Telephone diet recall summer 2018	46 (82)	60 (91)	0.18

[a]*P* for difference from Fisher's exact test comparing proportion completing visit in intervention and control group. Research visits also included an in-person diet recall.

Appendix Table 5. Change in HEI Score During Intervention Period, From Baseline

HEI score	Intervention group	Control group
HEI total score	4.13	1.94
HEI 1 score	0.84	0.48
HEI 2 score	0.85	0.1
HEI 3 score	0.22	0.03
HEI 4 score	–0.17	–0.04
HEI 5 score	0.13	–0.16
HEI 6 score	–0.02	–0.29
HEI 7 score	0.03	0.32
HEI 8 score	0.38	0.00
HEI 9 score	0.81	0.09
HEI 10 score	–1.44	–0.44
HEI 11 score	0.66	1.21
HEI 12 score	1.72	0.63

HEI, Healthy Eating Index.

Appendix Table 6. Anthropometrics and Biomarkers

Variable	Difference in means[a] (95% CI)	*p*-value for difference
Weight, kg	–1.56 (–3.79, 0.67)	0.17
BMI, kg/m^2	–0.43 (–1.52, 0.66)	0.44
Systolic blood pressure, mm Hg	–1.68 (–6.08, 2.72)	0.45
Diastolic blood pressure, mm Hg	–3.66 (–6.27, –1.05)	**0.01**
Serum glucose, mg/dL	1.45 (–12.81, 15.71)	0.84
HbA1c, %[b]	–0.25 (–1.10, 0.59)	0.55
High-density lipoprotein cholesterol, mg/dL	–0.86 (–2.30, 0.58)	0.24
Low-density lipoprotein cholesterol, mg/dL	2.28 (–3.93, 8.49)	0.47
Total cholesterol, mg/dL	3.55 (–3.83, 10.92)	0.35
Triglycerides, mg/dL	13.11 (–5.30, 31.52)	0.16

Notes: Boldface indicates statistical significance ($p<0.05$). Laboratory examinations were non-fasting.

[a]Control group is reference category for all comparisons.

[b]Among participants with HbA1c >6.5% at baseline.